1. **Database Design:** Consider the following description of an investment firm:
   a. The firm has a number of offices. Each office has a number of investment advisors who service investors. Investors own stocks that pay dividends.
   b. An office is managed by one of its advisors.
   c. An investor has a name, a unique investor number, a single investment advisor and own zero or more stocks.
   d. Each investor's holding of a stock contains information about the stock's ticker symbol (a 3 or 4 character code that uniquely identifies the stock, such as IBM or APPL), the stock's name (e.g., International Business Machines), the number of shares of stock owned by the investor, and the dividend per share paid by the stock. We only keep track of an investor's cumulative holding—we do not care about the individual transactions that led to this holding.
   e. an investment advisor has a name, a unique advisor number, one or more investors that the advisor services, and an office to which the advisor belongs.
   f. an office has an office number and an address.
   g. an advisor is associated with only one office
   h. an office may have multiple advisors,
   i. the dividend per share is determined by the stock (e.g., all holdings of IBM pay the same dividend, such as $.05 dividend per share).
   j. When a stock gets purchased or sold by an investor, we record the stock's ticker symbol, the transaction price, the date, the number of shares purchased/sold, the investor who purchased/sold the stock, and the advisor who conducted the transaction for the investor

   Answer the following questions:
   i. Define the entities and attributes for each entity and also define any relationships that have attributes.

   ii. Identify the primary and foreign keys for each entity. Please don't underline the attributes from the previous answer. Instead follow the format of the following example answer:
   Entity   Primary Key   Foreign Key(s)

   iii. Draw an ER diagram for this investment firm that shows entities, relationships, and multiplicity of relationships.